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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,190	11/04/2003	Edward R. diGirolamo	4782-042	5075
24112	7590	08/09/2007		
COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518			EXAMINER DREIDAME, HUNTER M	
			ART UNIT 3635	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/701,190	<b>Applicant(s)</b> DIGIROLAMO ET AL.	
	<b>Examiner</b> Hunter M. Dreidame	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☒ Claim(s) 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

In view of applicant's amendment received 08 May, 2007, Applicant's Remarks have been carefully considered but are not deemed persuasive to overcome the rejections of the previous office action. Therefore, the rejection of pending claims 1-34 has been reiterated in this final office action.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1 – 25 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,912,894 to Platt.**

**Claim 1:**

Platt discloses an interlocking cross tee (Fig. 1) capable of extending between two studs (17, Fig. 1) comprising a main member (25, Fig. 1) adapted to extend between two studs; the main member including first and second end portions (see marked figure); a projection (33, Fig. 1) extending from each end portion; wherein the main member and the projections form the stud spacer; and wherein the projections of the main members interlock (Fig. 4) with similar projections of other main members.

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**Claim 2:**

The stud spacer of claim 1 wherein each projection includes a locking surface (53, Fig. 5), an opening (59, Fig. 5), a deflector (57, Fig. 5) disposed adjacent the opening, and a stop (51, Fig. 5).

**Claim 3:**

The stud spacer of claim 2 wherein when two projections are interlocked, the locking surface of one projection engages the stop of the other projection (Fig. 4)

**Claim 4:**

The stud spacer of claim 1, wherein each projection is elongated and when connected to a similar projection at least partially overlies or underlies the similar projection (Fig. 4).

**Claim 5:**

The stud spacer of claim 1, wherein each of the two projections includes a deflectable terminal end (59, Fig. 5) and an opening (57, Fig. 5).

**Claim 6:**

The stud spacer of claim 1 wherein each projection includes a terminal end portion (see marked figure), a locking tab (41, Fig. 5) disposed on the terminal end portion, a deflector (59, Fig. 5) disposed inwardly of the locking tab; an opening (57, Fig. 5) formed in the projection adjacent the deflector; and a stop (51, Fig. 5) disposed inwardly of the opening.

**Claim 7:**

Platt discloses a stud spacer assembly (Fig. 1) for extending between a series of studs (17, Fig. 1), comprising at least first and second stud spacers (25, Fig. 1) wherein each stud spacer extends between a pair of studs (17, Fig. 1), said first stud spacer including a first projection (33, Fig. 1) and said second stud spacer including a second projection (33, Fig. 1), said first and second projections adapted to interlock so as to connect the first and second stud spacers together (Fig. 4), and wherein each projection includes a locking surface (53, Fig. 5) and a stop (51, Fig. 5) and wherein when interlocked, the locking surface of the first projection is engaged with the stop of the second projection and the locking surface of the second projection is engaged with the stop of the first projection (Fig. 4).

**Claim 8:**

The stud spacer assembly of claim 7 wherein when connected the first and second projections overlie each other (Fig. 4).

**Claim 9:**

The stud spacer assembly of claim 8 wherein each projection includes an opening (59, Fig. 5) and wherein when connected the first projection extends through the opening of the second projection and the second projection extends through the opening of the first projection (Fig. 4).

**Claim 10:**

The stud spacer assembly of claim 9 wherein at least a portion of each projection is at least slightly yieldable such that a portion of each projection can slightly flex during the course of interconnecting the projections (Figs. 5 and 6).

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**Claim 11:**

The stud spacer assembly of claim 7 wherein each projection includes an opening (59, Fig. 5) and a deflector (57, Fig. 5) and wherein the locking surface of each projection is formed on a terminal end portion (see marked figure) of the projection and wherein when connected the terminal end portion of the first projection projects through the opening in the second projection and the terminal end portion of the second projection projects through the opening in the first projection (Fig. 4).

**Claim 12:**

The stud spacer assembly of claim 11 wherein the deflector of the first projection deflects the terminal end of the second projection through the opening of the first projection and wherein the deflector of the second projection deflects the terminal end of the first projection through the opening in the second projection (Fig. 4).

**Claim 13:**

The stud spacer assembly of claim 7 wherein the locking surface includes a tab (41, Fig. 5) and the stop includes a tab receiving opening (59, Fig. 5) and wherein when the first and second projections are interconnected the first projection is extended over a portion of the second projection and a portion of the first projection is inserted through the opening in the second projection such that the locking tab of the first projection seats within the tab receiving opening formed in the second projection and wherein the second projection is extended underneath a portion of the first projection and a portion of the second projection

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is inserted through the opening in the first projection wherein the locking tab of the second projection seats within the tab receiving opening of the first projection (Fig. 4).

**Claim 14:**

The stud spacer of assembly of claim 13 wherein each projection includes a deflector (57, Fig. 5) disposed adjacent the tab receiving opening and wherein the deflector on the first projection deflects a portion of the second projection upwardly through the opening in the first projection, and wherein the deflector in the second projection deflects a portion of the first projection downwardly through the opening in the second projection (Fig. 4).

**Claim 15:**

The stud spacer assembly of claim 7 wherein the locking surface of each projection includes a tab (41, Fig. 5) and wherein the stop of each projection includes a tab receiving opening (59, Fig. 5) and when the projections are connected the respective tabs are seated within the tab receiving openings (Fig. 4).

**Claim 16:**

Platt discloses a wall structure (Fig. 1), comprising a series of spaced apart studs (17, Fig. 1) with each stud having an opening (18, Fig. 1) formed therein, a series of stud spacers (25, Fig. 1) extending between respective studs; each stud spacer including first and second projections (33, Fig. 1) that extend from opposite ends of the stud spacer; said first and second projections of each stud spacer adapted to connect to first and second projections of other stud

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spacers so as to interconnect the stud spacers of the wall structure (Fig. 4); and each projections including a locking surface (53, Fig. 5) and a locking stop (51, Fig. 5) and wherein when interconnected the locking surface of the first projection is engaged with the locking stop of the second projection and the Locking surface of the second projection is engaged with the locking stop of the first projection (Fig. 4).

**Claim 17:**

The wall structure of claim 16 wherein when connected the respective projections at least partially overlie one another (Fig. 4).

**Claim 18:**

The wall structure of claim 17 wherein the first projection includes a terminal end portion (see marked figure) and an opening (59, Fig. 5) and the second projection includes a terminal end and an opening (59, Fig. 5) and wherein the terminal end portions of the respective projections are projected through the openings within the projections when the projections are interconnected (Figs. 2 – 4).

**Claim 19:**

Platt discloses a method of interconnecting a first stud spacer (25, Fig. 1) with a second stud spacer (25, Fig. 1) extending between studs (17, Fig. 1) in a wall structure (Fig. 1) wherein the first stud spacer includes a first projection (33, Fig. 1) and the second stud spacer includes a second projection (33, Fig. 1), comprising the steps of projecting the first and second projections of the first and second stud spacers through an opening (18, Fig. 5) through the stud; projecting



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the first projection through an opening (59, Fig. 5) in the second projection and engaging a locking surface (53, Fig. 5) associated with the first projection with a stop (51, Fig. 5) associated with the second projection, and projecting the second projection through an opening in the first projection and engaging a locking surface (53, Fig. 5) associated with the second projection with a stop (51, Fig. 5) associated with the first projection (shown in Figs. 2 – 5).

**Claim 20:**

The method of claim 19 including engaging the first projection with a deflector (57, Fig. 5) associated with the second projection and deflecting the first projection through the opening in the second projection, and engaging the second projection with a deflector (57, Fig. 5) associated with the first projection and deflecting the second projection through the opening in the first projection (shown in Figs. 2 – 5).

**Claim 21:**

The method of claim 20 including at least slightly bending a portion of each projection as the two projections are interconnected (Fig. 4).

**Claim 22:**

The method of claim 21 wherein the projections are at least slightly flexed in response to engaging the respective deflectors carried by the projections (Fig. 4).

**Claim 23:**

The method of claim 19 wherein the locking surfaces comprise locking tabs (41, Fig. 5) and wherein the stops comprises locking seats (see marked

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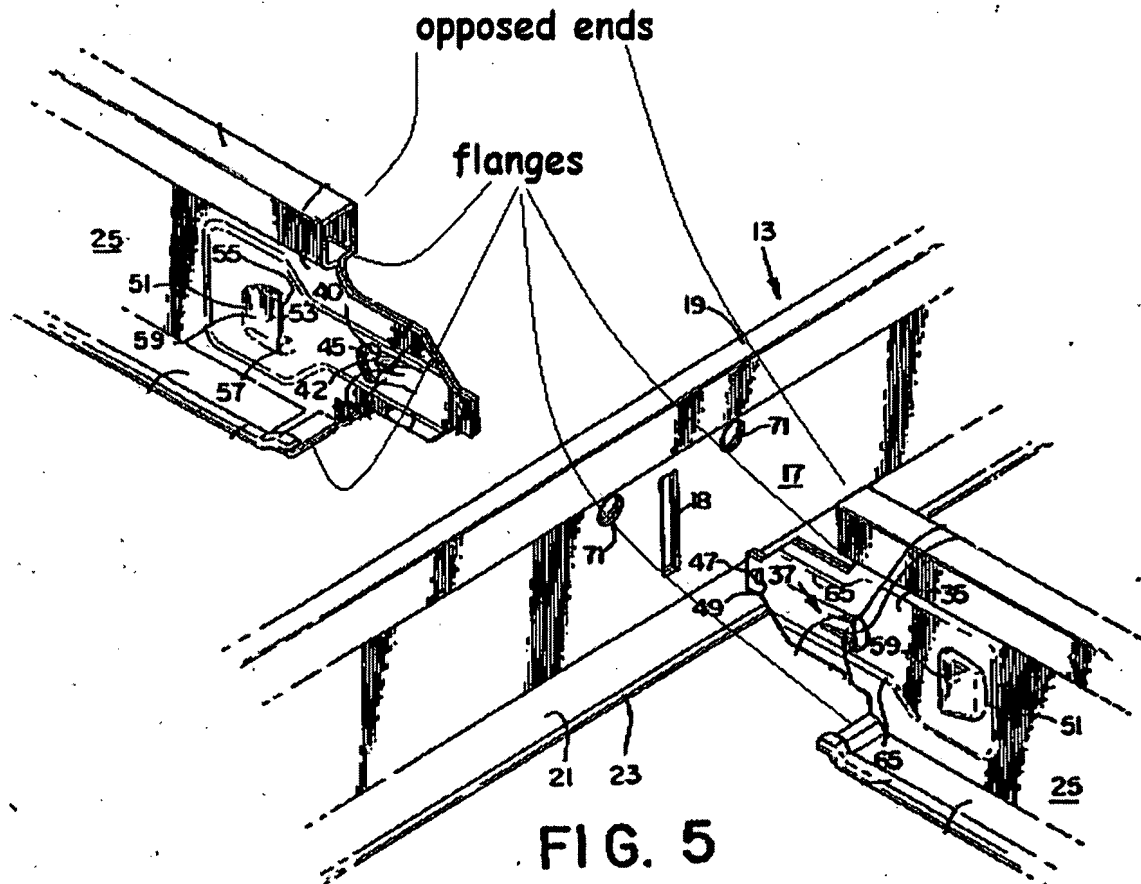
figure) and wherein when the projections are interconnected the locking tabs of the respective projections are seated within the locking seats of the projections (Fig. 4).

**Claim 24:**

The method of claim 19 including contacting a terminal end (see marked figure) of the first projection with a deflector (57, Fig. 5) disposed on the second projection and deflecting the terminal end of the first projection downwardly through the opening in the second projection, and contacting a terminal end portion (see marked figure) of the second projection with a deflector (57, Fig. 5) on the first projection and deflecting the terminal end of the second projection upwardly through the opening in the first projection (Fig. 4).

**Claim 25:**

The method of claim 24 wherein the locking tabs carried by the first and second projections snap into the tab receiving openings once the terminal ends of the respective projections have been inserted through the openings in the respective projections (Fig. 4).



### Annotated Figure from Platt Fig. 5

**Claim 26:**

The stud spacer of claim 1 including one or more flanges (see annotated figure) disposed on either end portion of the main member for connecting to one of the two studs.

**Claim 27:**

The stud spacer of claim 26 including at least two flanges (see annotated figure), one flange disposed on the first end portion of the main member and one

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flange disposed on the second end of the main member; each flange extending generally normal relative to the main member.

**Claim 28:**

The stud spacer of claim 1 including a pair of spaced apart flanges (see annotated figure) disposed on the first end portion of the main member for connecting to one of the two studs; the spaced apart flanges being angled with respect to the main member such that the flanges extend generally normal to the main member; and wherein the projection extending from the first end portion of the main member extends between the pair of spaced apart flanges.

**Claim 29:**

The stud spacer assembly of claim 7 wherein each stud spacer includes opposed ends (see annotated figure), and wherein each stud spacer includes one or more flanges (see annotated figure) disposed on one or both end portions of the stud spacer for connecting the stud spacer to one or more studs.

**Claim 30:**

The stud spacer assembly of claim 29 wherein each stud spacer includes a pair of spaced apart flanges (see annotated figure) disposed on each end portion thereof for connecting to one stud.

**Claim 31:**

The wall structure of claim 16 wherein each stud spacer includes one or more flanges (see annotated figure) disposed on opposite end portions for connecting each stud spacer to at least two spaced apart studs that form a part of the wall structure (see Fig. 1); and wherein each flange is connected to one

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stud such that the series of stud spacers that form a part of the wall structure are interconnected to the studs (see Fig. 1).

**Claim 32:**

The wall structure of claim 31 wherein each consecutive pair of studs of the wall structure are interconnected by a stud spacer (see Fig. 1), and wherein the stud spacer includes at least one flange (see annotated figure) disposed on opposite ends thereof, and wherein each flange is connected to one stud.

**Claim 33:**

The method of claim 19 including securing at least one of the first or second stud spacers to the stud (stud spacers are secured to stud via interlocking projections 33).

***Allowable Subject Matter***

Claim 34 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant argues that Examiner is misusing the plain and ordinary meanings of "stud" and "stud spacer". Examiner maintains his rejection in that "stud" is being given its broadest reasonable interpretation. An orientation of the stud is not claimed and therefor it is being interpreted that the stud may be positioned in a position otherwise than vertically extending.

***Conclusion***

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**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter M. Dreidame whose telephone number is (571)272-5177. The examiner can normally be reached on Monday - Friday 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571)272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Hunter M. Dreidame, Patent Examiner  
August 6, 2007



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